Actuarial Valuation Report for the 1959 Survivor Benefit Program as of June 30, 2005

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Actuarial Certification

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the funded condition of the 1959 Survivor Program for Public Agency 1st, 2nd, 3rd, 4th, and Indexed Level, and the State and Schools 5th Level Pools. This valuation is based on the beneficiary and membership data provided to the Actuarial Office, the statement of assets provided by the CalPERS Fiscal Services Division, and the benefits provided under this program. It is our opinion that this valuation has been performed by qualified actuaries in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this program.

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Purpose of the Report

This actuarial valuation of the 1959 Survivor Program for Public Agency 1st, 2nd, 3rd, 4th and Indexed level and the State and Schools 5th level pools within the California Public Employees' Retirement System (CalPERS) was performed by CalPERS' staff actuaries as of June 30, 2005 in order to

- set forth the actuarial value of assets and liabilities of this program as of June 30, 2005;
- establish the actuarially required employer premiums for these pools within the program for the fiscal year July 1, 2006 through June 30, 2007; and
- provide actuarial information as of June 30, 2005 to the CalPERS Board of Administration and other interested parties.

Use of this report for other purposes is inappropriate.

Funded Status of the Plan

Shown below are the Actuarial Value of Assets, the Accrued Liability, Excess Assets, and Funded Ratio of all pools within the 1959 Survivor Benefit Program.

Plan	Actuarial Value of Assets	Accrued Liability	Excess Assets	Funded Ratio based on AVA*	Funded Ratio based on MVA*
State 5th Level Pool	$ 104,811,084	$ 131,331,965	$ (26,520,881)	79.8%	82.2%
Schools 5th Level Pool	$ 47,673,355	$ 11,414,604	$ 36,258,751	417.7%	432.0%
PA 1st Level Pool	$ 25,010,120	$ 2,501,861	$ 22,508,259	999.7%	1,048.2%
PA 2nd Level Pool	$ 6,420,007	$ 1,825,157	$ 4,594,850	351.8%	368.1%
PA 3rd Level Pool	$ 75,852,828	$ 24,087,838	$ 51,764,990	314.9%	325.9%
PA 4th Level Pool	$ 122,130,132	$ 91,237,149	$ 30,892,983	133.9%	139.6%
PA Indexed Level Pool	$ 16,141,731	$ 10,623,833	$ 5,517,898	151.9%	157.1%

*The market ratio indicator is a more correct measure of the solvency of the plan, since it compares the true market value of assets on hand to pay liabilities.

Required Employer and Employee Monthly Premiums

The actuarially required employer and employee monthly premiums per covered member per month for the 1959 Survivor Program for the fiscal year July 1, 2006 through June 30, 2007 are shown below. The results for fiscal year July 1, 2005 through June 30, 2006 are shown for comparison. Except for the Public Agency Indexed Level pool, these monthly premiums are determined using a Modified Term Insurance funding method. Monthly premiums for the Public Agency Indexed Level pool are determined using the Entry Age Normal funding method.

Required Monthly Premiums

	2005-2006 Premium			2006-2007 Premium		
Plan	Employer	Employee	Total	Employer	Employee	Total
State 5th Level Pool*	$5.65	$5.65	$11.30	$5.40	$5.40	$10.80
Schools 5th Level Pool*	$0.00	$2.00	$2.00	$0.00	$2.00	$2.00
PA 1st Level Pool**	$0.00	$2.00	$2.00	$0.00	$2.00	$2.00
PA 2nd Level Pool**	$0.00	$2.00	$2.00	$0.00	$2.00	$2.00
PA 3rd Level Pool**	$0.00	$2.00	$2.00	$0.00	$2.00	$2.00
PA 4th Level Pool**	$2.30	$2.00	$4.30	$2.40	$2.00	$4.40
PA Indexed Level Pool*	$0.00	$2.00	$2.00	$0.80	$2.00	$2.80

* Section 21581 of the California Public Employees' Retirement Law requires mandatory cost sharing when the total premium exceeds $4.00

** Mandatory $2.00 member monthly premium required

The required employee premium for the State 5th level pool will change from $5.65 to $5.40 per member, per month (or from $2.61 to $2.49 for biweekly paid members) for fiscal year 2006/2007. This is in accordance with State Statute 21581 which specifies that once the total required premium (after amortization of surplus/unfunded liability) exceeds $4, the employer and the member shall evenly share the required monthly premium. Employee required premiums for all of the other pools shall remain the same, $2.00, as in the prior year.

Changes Since Prior Valuation

Actuarial Assumptions – There was no change in actuarial assumptions since the June 30, 2004 valuation.

Actuarial Method – There was no change in the actuarial method since the June 30, 2004 valuation.

Benefits – There was no change in the existing benefit levels in the program since the June 30, 2004 valuation.

Comparison of Current and Prior Results

Shown below are the comparisons of key valuation results for the current valuation date compared to corresponding values from the prior valuation date.

State 5th Level Pool

	June 30, 2004	June 30, 2005
Covered Active Members	64,252	70,193
Beneficiaries Included in the Valuation		
Deferred (eligible, but not yet receiving benefits)	269	284
Receiving Benefits	1,397	1,387
Total	1,666	1,671
Present Value of Benefits	$ 132,235,853	$ 131,331,965
Assets		
Actuarial Value	$ 105,407,569	$ 104,811,084
Market Value	$ 103,647,495	$ 107,917,336
Excess Assets	$ (26,828,284)	$ (26,520,881)
Required Employer Monthly Premium Per Member		
Before Amortization of Unfunded Liability/Excess Assets	$8.30	$8.00
After Amortization of Unfunded Liability/Excess Assets	$11.30	$10.80
After employer/employee premium sharing	$5.65	$5.40
Funded Ratio based on AVA*	79.7%	79.8%
Funded Ratio based on MVA*	78.4%	82.2%

Schools 5th Level Pool

	June 30, 2004	June 30, 2005
Covered Active Members	9,325	9,402
Beneficiaries Included in the Valuation		
Deferred (eligible, but not yet receiving benefits)	24	19
Receiving Benefits	139	138
Total	163	157
Present Value of Benefits	$ 11,786,865	$ 11,414,604
Assets		
Actuarial Value	$ 45,268,279	$ 47,673,355
Market Value	$ 44,741,420	$ 49,308,207
Excess Assets	$ 33,481,414	$ 36,258,751
Required Employer Monthly Premium Per Member		
Before Amortization of Unfunded Liability/Excess Assets	$5.00	$5.00
After Amortization of Unfunded Liability/Excess Assets	$0.00	$0.00
After employer/employee premium sharing	$0.00	$0.00
Funded Ratio based on AVA*	384.1%	417.7%
Funded Ratio based on MVA*	379.6%	432.0%

*The market ratio indicator is a more correct measure of the solvency of the plan, since it compares the true market value of assets on hand to pay liabilities.

Comparison of Current and Prior Results (continued)

Shown below are the comparisons of key valuation results for the current valuation date compared to corresponding values from the prior valuation date.

Public Agency 1st Level Pool

	June 30, 2004	June 30, 2005
Covered Active Members	11,706	8,681
Beneficiaries Included in the Valuation		
Deferred (eligible, but not yet receiving benefits)	50	49
Receiving Benefits	114	90
Total	164	139
Present Value of Benefits	$ 3,022,736	$ 2,501,861
Assets		
Actuarial Value	$ 26,379,097	$ 25,010,120
Market Value	$ 26,379,097	$ 26,223,933
Excess Assets	$ 23,356,361	$ 22,508,259
Required Employer Monthly Premium Per Member		
Total premium required	$ 1.30	$ 1.30
Premium required after Employee Contributions	$ 0.00	$ 0.00
Employer premium after amortization of excess assets	$ 0.00	$ 0.00
Funded Ratio based on AVA*	872.7%	999.7%
Funded Ratio based on MVA*	872.7%	1,048.2%

Public Agency 2nd Level Pool

	June 30, 2004	June 30, 2005
Covered Active Members	4,535	4,087
Beneficiaries Included in the Valuation		
Deferred (eligible, but not yet receiving benefits)	24	28
Receiving Benefits	52	53
Total	76	81
Present Value of Benefits	$ 1,725,306	$ 1,825,157
Assets		
Actuarial Value	$ 6,241,163	$ 6,420,007
Market Value	$ 6,241,163	$ 6,718,465
Excess Assets	$ 4,515,857	$ 4,594,850
Required Employer Monthly Premium Per Member		
Total premium required	$ 1.70	$ 1.70
Premium required after Employee Contributions	$ 0.00	$ 0.00
Employer premium after amortization of excess assets	$ 0.00	$ 0.00
Funded Ratio based on AVA*	361.7%	351.8%
Funded Ratio based on MVA*	361.7%	368.1%

*The market ratio indicator is a more correct measure of the solvency of the plan, since it compares the true market value of assets on hand to pay liabilities.

Comparison of Current and Prior Results (continued)

Shown below are the comparisons of key valuation results for the current valuation date compared to corresponding values from the prior valuation date.

Public Agency 3rd Level Pool

	June 30, 2004	June 30, 2005
Covered Active Members	49,590	47,783
Beneficiaries Included in the Valuation		
Deferred (eligible, but not yet receiving benefits)	240	233
Receiving Benefits	458	443
Total	698	676
Present Value of Benefits	$ 24,847,280	$ 24,087,838
Assets		
Actuarial Value	$ 76,080,721	$ 75,852,828
Market Value	$ 75,191,776	$ 78,501,034
Excess Assets	$ 51,233,441	$ 51,764,990
Required Employer Monthly Premium Per Member		
Total premium required	$ 2.60	$ 2.60
Premium required after Employee Contributions	$ 0.60	$ 0.60
Employer premium after amortization of excess assets	$ 0.00	$ 0.00
Funded Ratio based on AVA*	306.2%	314.9%
Funded Ratio based on MVA*	302.6%	325.9%

Public Agency 4th Level Pool

	June 30, 2004	June 30, 2005
Covered Active Members	60,392	64,176
Beneficiaries Included in the Valuation		
Deferred (eligible, but not yet receiving benefits)	216	234
Receiving Benefits	603	662
Total	819	896
Present Value of Benefits	$ 82,436,899	$ 91,237,149
Assets		
Actuarial Value	$ 114,185,447	$ 122,130,132
Market Value	$ 113,914,564	$ 127,410,156
Excess Assets	$ 31,748,548	$ 30,892,983
Required Employer Monthly Premium Per Member		
Total premium required	$ 7.10	$ 7.10
Premium required after Employee Contributions	$ 5.10	$ 5.10
Employer premium after amortization of excess assets	$ 2.30	$ 2.40
Funded Ratio based on AVA*	138.5%	133.9%
Funded Ratio based on MVA*	138.2%	139.6%

*The market ratio indicator is a more correct measure of the solvency of the plan, since it compares the true market value of assets on hand to pay liabilities.

Comparison of Current and Prior Results (continued)

Shown below are the comparisons of key valuation results for the current valuation date compared to corresponding values from the prior valuation date.

Public Agency Indexed Level Pool

	June 30, 2004	June 30, 2005
Covered Active Members	5,410	8,783
Beneficiaries Included in the Valuation		
Deferred (eligible, but not yet receiving benefits)	15	21
Receiving Benefits	48	70
Total	63	91
Entry Age Normal Accrued Liability	$ 6,772,638	$ 10,623,833
Assets		
Actuarial Value	$ 10,841,380	$ 16,141,731
Market Value	$ 10,766,818	$ 16,693,577
Excess Assets	$ 4,068,742	$ 5,517,898
Required Employer Monthly Premium Per Member		
Before Amortization of Unfunded Liability/Excess Assets	$ 6.50	$ 6.40
After Amortization of Unfunded Liability/Excess Assets	$ 2.00	$ 2.80
After employer/employee premium sharing	$ 0.00	$ 0.80
Funded Ratio based on AVA*	160.1%	151.9%
Funded Ratio based on MVA*	159.0%	157.1%

*The market ratio indicator is a more correct measure of the solvency of the plan, since it compares the true market value of assets on hand to pay liabilities.

Development of Funding Requirements for State 5th and Schools 5th Level Pools

June 30, 2005 Annual Valuation of 1959 Survivor Program

	State 5th Level	School 5th Level
1) Development of Unfunded Liability		
a. Present Value of Future Survivor Benefits	$131,331,965	$11,414,604
b. Actuarial Value of Assets	$104,811,084	$47,673,355
c. Unfunded Accrued Liability/(Excess Assets) [1(a)-1(b)]	$26,520,881	($36,258,751)
2) Development of Normal Cost		
a. Present Value of Benefits for 2001-2004 Deaths [1]	$25,210,264	$2,094,859
b. Number of 2001-2004 Member Months [1]	3,154,920	417,684
c. Total per member, per month Term Insurance Normal Cost [2(a)/2(b)], rounded to nearest $0.10	$8.00	$5.00
3) 2005 Projected Unfunded Liability		
a. 2005 Unfunded Accrued Liability/(Excess Assets) as of June 30, 2006 [1(c)*1.0775]	$28,576,250	($39,068,804)
b. Projected Normal Cost Accrual 2005-2006 with interest	$7,374,415	$617,368
c. Projected Employer Contributions 2005-2006 with interest	$5,020,325	$0
d. Projected Employee Contributions 2005-2006 with interest	$5,020,325	$238,040
e. Total Projected UAL/(Excess Assets) as of June 30, 2006 [3(a)+3(b)-3(c)-3(d)]	$25,910,014	($38,689,476)
4) 2006/2007 Required Contribution		
a. Required Normal Cost per member, per month [2(c)]	$8.00	$5.00
b. Projected Active Members as of 6/30/2006	72,474	9,708
c. Required Normal Cost Contribution [12*4(a)*4(b)*1.0775^$^{1/2}$]	$7,222,077	$604,630
d. Amortization of the UAL/(Excess Assets)	$2,165,120	($604,630)
e. Total Required Contribution per member, per month [(4(c)+4(d))/(4(b)/12)], rounded to nearest $0.10	$10.80	$0.00
f. Amortization Period	30-year	9999-year
5) 2006/2007 Required Employer and Employee Premiums With Cost Sharing Provision		
a. Required Employee Premium per member, per month [maximum(2,4(e)/2)]	$5.40	$2.00
b. Required Employer Premium per member, per month [maximum(0,4(e)-5(a))]	$5.40	$0.00

Notes:
1 - Schools 5th Level is based on 2000-2003 experience. (see page 31 for a more detailed explanation)

Development of Funding Requirements for Public Agency 1st and 2nd Level Pools

June 30, 2005 Annual Valuation of 1959 Survivor Program

	Public Agency Level 1	Public Agency Level 2
1) Development of Unfunded Liability		
a. Present Value of Future Survivor Benefits	$2,501,861	$1,825,157
b. Actuarial Value of Assets	$25,010,120	$6,420,007
c. Unfunded Accrued Liability/(Excess Assets) [1(a)-1(b)]	($22,508,259)	($4,594,850)
2) Development of Normal Cost		
a. Present Value of Benefits for 2001-2004 Deaths[1]	$8,224,475	$10,280,593
b. Number of 2001-2004 Member Months[1]	6,081,228	6,081,228
c. Total Per Member/Per Month Term Insurance Normal Cost [2(a)/2(b)], rounded to nearest $0.10	$1.40	$1.70
3) 2006 Projected Unfunded Liability		
a. 2005 Unfunded Accrued Liability as of June 30, 2006 [1(c)*1.0775]	($24,252,649)	($4,950,951)
b. Projected Normal Cost Accrual 2005-2006 with interest	$149,575	$85,506
c. Projected Employer Contributions 2005-2006 with interest	$0	$0
d. Projected Employee Contributions 2005-2006 with interest	$205,455	$96,723
e. Total Projected UAL as of June 30, 2006 [3(a)+3(b)-3(c)-3(d)]	($24,308,529)	($4,962,168)
4) 2006/2007 Required Contribution		
a. Required Normal Cost per member, per month [2(c)]	$1.40	$1.70
b. Projected Active Members as of 6/30/2006	7,813	3,678
c. Required Normal Cost Contribution [12*4(a)*4(b)*1.0775^1/2]	$136,250	$77,884
d. Amortization of the UAL/(Excess Assets)	($136,250)	($77,884)
e. Total Required Contribution Per Member, Per Month [(4(c)+4(d))/(4(b)/12)], rounded to nearest $0.10	$0.00	$0.00
f. Amortization Period	9999-year	9999-year
5) 2006/2007 Required Employer and Employee Premiums		
a. Required Employee Premium per member, per month	$2.00	$2.00
b. Required Employer Premium per member, per month [maximum(0,4(e)-5(a))]	$0.00	$0.00

Notes:

1 - Mortality experience and survivor distribution are assumed to be homogeneous across all Public Agency pools and are added together to develop normal costs in order to improve credibility of the data.

Development of Funding Requirements for Public Agency 3rd and 4th Level Pools

June 30, 2005 Annual Valuation of 1959 Survivor Program

	Public Agency Level 3	Public Agency Level 4
1) Development of Unfunded Liability		
a. Present Value of Future Survivor Benefits	$24,087,838	$91,237,149
b. Actuarial Value of Assets	$75,852,828	$122,130,132
c. Unfunded Accrued Liability/(Excess Assets) [1(a)-1(b)]	($51,764,990)	($30,892,983)
2) Development of Normal Cost		
a. Present Value of Benefits for 2001-2004 Deaths[1]	$15,992,034	$43,406,950
b. Number of 2001-2004 Member Months[1]	6,081,228	6,081,228
c. Total Per Member/Per Month Term Insurance Normal Cost [2(a)/2(b)], rounded to nearest $0.10	$2.60	$7.10
3) 2006 Projected Unfunded Liability		
a. 2005 Unfunded Accrued Liability as of June 30, 2006 [1(c)*1.0775]	($55,776,777)	($33,287,189)
b. Projected Normal Cost Accrual 2005-2006 with interest	$1,567,683	$6,203,698
c. Projected Employer Contributions 2005-2006 with interest	$0	$1,939,732
d. Projected Employee Contributions 2005-2006 with interest	$1,160,643	$1,686,723
e. Total Projected UAL as of June 30, 2006 [3(a)+3(b)-3(c)-3(d)]	($55,369,737)	($30,709,946)
4) 2006/2007 Required Contribution		
a. Required Normal Cost per member, per month [2(c)]	$2.60	$7.10
b. Projected Active Members as of 6/30/2006	45,394	71,235
c. Required Normal Cost Contribution [12*4(a)*4(b)*1.0775^1/2]	$1,470,150	$6,300,016
d. Amortization of the UAL/(Excess Assets)	($1,470,150)	($2,566,217)
e. Total Required Contribution Per Member, Per Month [(4(c)+4(d))/(4(b)/12)], rounded to nearest $0.10	$0.00	$4.40
f. Amortization Period	9999-year	30-year
5) 2006/2007 Required Employer and Employee Premiums		
a. Required Employee Premium per member, per month	$2.00	$2.00
b. Required Employer Premium per member, per month [maximum(0,4(e)-5(a))]	$0.00	$2.40

Notes:

1 - Mortality experience and survivor distribution are assumed to be homogeneous across all Public Agency pools and are added together to develop normal costs in order to improve credibility of the data.

Development of Funding Requirements for Indexed Level Pool

June 30, 2005 Annual Valuation of 1959 Survivor Program

	Public Agency Indexed Level
1) Development of Unfunded Liability	
a. Present Value of Future Benefits for Active Members	$7,313,098
b. Present Value of Future Benefits for Current Survivors	$7,912,989
c. Total Present Value of Future Benefits [1(a)+1(b)]	$15,226,087
d. Present Value of Future Normal Costs	$4,602,254
e. Entry Age Normal Total Accrued Liability [1(c)-1(d)]	$10,623,833
f. Actuarial Value of Assets	$16,141,731
g. Unfunded Accrued Liability/(Excess Assets) [1(e)-1(f)]	($5,517,898)
2) Development of Normal Cost	
a. Required Entry Age Normal Cost	$676,992
b. Active Members as of June 30, 2005	8,783
c. Total per member per month Entry Age Normal Cost [2(a)/2(b)*12], rounded to nearest $0.10	$6.40
3) 2006 Projected Unfunded Liability	
a. 2005 Unfunded Accrued Liability/(Excess Assets) as of June 30, 2006 [1(g)*1.0775]	($5,945,535)
b. Projected Normal Cost Accrual 2005-2006 with interest	$765,316
c. Projected Employer Contributions 2005-2006 with interest	$0
d. Projected Employee Contributions 2005-2006 with interest	$230,841
e. Total Projected UAL as of June 30, 2006 [3(a)+3(b)-3(c)-3(d)]	($5,411,060)
4) 2006/2007 Required Contribution	
a. Required Normal Cost per member, per month [2(c)]	$6.40
b. Projected Active Members as of June 30, 2006	9,749
c. Required Normal Cost Contribution [12*4(a)*4(b)*1.0775^$^{1/2}$]	$777,195
d. Amortization of the UAL/(Excess Assets)	($452,165)
e. Total Required Contribution per member, per month [(4(c)+4(d))/(4(b)/12)], rounded to nearest $0.10	$2.80
f. Amortization Period	30-year
4) 2006/2007 Employer and Employee Premiums with Cost Sharing Provision	
a. Required Employee Premium per member, per month [maximum(2,4(e)/2)]	$2.00
b. Required Employer Premium per member, per month [maximum(0,4(e)-5(a))]	$0.80

Gain/(Loss) Analysis 6/30/2004 – 6/30/2005

State 5th Level Pool

Amounts as of 6/30/2004		
1)	Present Value of Benefits	$ 132,235,853
2)	Actuarial Value of Assets	105,407,569
3)	Unfunded Liability/(Excess Assets) [(1)-(2)]	26,828,284
Amounts During the Period 6/30/2004 – 6/30/2005		
4)	Expected Claims for the Fiscal Year 6/30/2004 – 6/30/2005	6,711,494
5)	Employer and Employee Premiums Collected	6,364,717
6)	Benefit Payments	(15,022,919)
7)	Net Liabilities Transferred into the State 5th level pool	0
8)	Net Assets Transferred into the State 5th level pool	0
Expected Amounts as of 6/30/2005		
9)	Expected Present Value of Benefits $[(1) * 1.0775 + ((4) + (6) + (7)) * (1.0775)^{1/2}]$	133,856,649
10)	Expected Actuarial Value of Assets $[(2) * 1.0775 + ((5) + (6) + (8)) * (1.0775)^{1/2}]$	104,589,208
11)	Expected Unfunded Liability/(Excess Assets) [(9)-(10)]	29,267,440
Actual Amounts as of 6/30/2005		
12)	Actual Present Value of Benefits	131,331,965
13)	Actual Actuarial Value of Assets	104,811,084
14)	Actual Unfunded Liability/(Excess Assets) [(12)-(13)]	26,520,881
Gain/(Loss) for the Period 6/30/2004 – 6/30/2005		
15)	Liability Gain/(Loss)	2,524,684
16)	Asset Gain/(Loss)	221,875
17)	Total Gain/(Loss)	$ 2,746,559

Gain/(Loss) Analysis 6/30/2004 – 6/30/2005

Schools 5th Level Pool

Amounts as of 6/30/2004		
1)	Present Value of Benefits	$ 11,786,865
2)	Actuarial Value of Assets	45,268,279
3)	Unfunded Liability/(Excess Assets) [(1)-(2)]	(33,481,414)
Amounts During the Period 6/30/2004 – 6/30/2005		
4)	Expected Claims for the Fiscal Year 6/30/2004 – 6/30/2005	564,057
5)	Employer and Employee Premiums Collected	219,273
6)	Benefit Payments	(1,394,571)
7)	Net Liabilities Transferred into the Schools 5th level pool	0
8)	Net Assets Transferred into the Schools 5th level pool	0
Expected Amounts as of 6/30/2005		
9)	Expected Present Value of Benefits [(1) * 1.0775 + ((4) + (6) + (7)) * $(1.0775)^{1/2}$]	11,838,251
10)	Expected Actuarial Value of Assets [(2) * 1.0775 + ((5) + (6) + (8)) * $(1.0775)^{1/2}$]	47,556,580
11)	Expected Unfunded Liability/(Excess Assets) [(9)-(10)]	(35,718,328)
Actual Amounts as of 6/30/2005		
12)	Actual Present Value of Benefits	11,414,604
13)	Actual Actuarial Value of Assets	47,673,355
14)	Actual Unfunded Liability/(Excess Assets) [(12)-(13)]	(36,258,751)
Gain/(Loss) for the Period 6/30/2004 – 6/30/2005		
15)	Liability Gain/(Loss)	423,647
16)	Asset Gain/(Loss)	116,775
17)	Total Gain/(Loss)	$ 540,423

Gain/(Loss) Analysis 6/30/2004 – 6/30/2005

Public Agency 1st Level Pool

Amounts as of 6/30/2004	
1) Present Value of Benefits	$ 3,022,736
2) Actuarial Value of Assets	26,379,097
3) Unfunded Liability/(Excess Assets) [(1)-(2)]	(23,356,361)
Amounts During the Period 6/30/2004 – 6/30/2005	
4) Expected Claims for the Fiscal Year 6/30/2004 – 6/30/2005	163,911
5) Employer and Employee Premiums Collected	504,348
6) Benefit Payments	(244,652)
7) Net Liabilities Transferred into the 1st level pool	(708,635)
8) Net Assets Transferred into the 1st level pool	(3,631,533)
Expected Amounts as of 6/30/2005	
9) Expected Present Value of Benefits [(1) * 1.0775 + ((4) + (6) + (7)) * $(1.0775)^{1/2}$]	2,437,605
10) Expected Actuarial Value of Assets [(2) * 1.0775 + ((5) + (6) + (8)) * $(1.0775)^{1/2}$]	24,923,419
11) Expected Unfunded Liability/(Excess Assets) [(9)-(10)]	(22,485,814)
Actual Amounts as of 6/30/2005	
12) Actual Present Value of Benefits	2,501,861
13) Actual Actuarial Value of Assets	25,010,120
14) Actual Unfunded Liability/(Excess Assets) [(12)-(13)]	(22,508,259)
Gain/(Loss) for the Period 6/30/2004 – 6/30/2005	
15) Liability Gain/(Loss)	(64,256)
16) Asset Gain/(Loss)	86,701
17) Total Gain/(Loss)	$ 22,445

Gain/(Loss) Analysis 6/30/2004 – 6/30/2005

Public Agency 2nd Level Pool

Amounts as of 6/30/2004	
1) Present Value of Benefits	$ 1,725,306
2) Actuarial Value of Assets	6,241,163
3) Unfunded Liability/(Excess Assets) [(1)-(2)]	(4,515,857)
Amounts During the Period 6/30/2004 – 6/30/2005	
4) Expected Claims for the Fiscal Year 6/30/2004 – 6/30/2005	86,910
5) Employer and Employee Premiums Collected	251,853
6) Benefit Payments	(178,729)
7) Net Liabilities Transferred into the 2nd level pool	0
8) Net Assets Transferred into the 2nd level pool	(387,340)
Expected Amounts as of 6/30/2005	
9) Expected Present Value of Benefits [(1) * 1.0775 + ((4) + (6) + (7)) * $(1.0775)^{1/2}$]	1,763,706
10) Expected Actuarial Value of Assets [(2) * 1.0775 + ((5) + (6) + (8)) * $(1.0775)^{1/2}$]	6,398,688
11) Expected Unfunded Liability/(Excess Assets) [(9)-(10)]	(4,634,982)
Actual Amounts as of 6/30/2005	
12) Actual Present Value of Benefits	1,825,157
13) Actual Actuarial Value of Assets	6,420,007
14) Actual Unfunded Liability/(Excess Assets) [(12)-(13)]	(4,594,850)
Gain/(Loss) for the Period 6/30/2004 – 6/30/2005	
15) Liability Gain/(Loss)	(61,451)
16) Asset Gain/(Loss)	21,318
17) Total Gain/(Loss)	$ (40,132)

Gain/(Loss) Analysis 6/30/2004 - 6/30/2005

Public Agency 3rd Level Pool

Amounts as of 6/30/2004		
1)	Present Value of Benefits	$ 24,847,280
2)	Actuarial Value of Assets	76,080,721
3)	Unfunded Liability/(Excess Assets) [(1)-(2)]	(51,233,441)
Amounts During the Period 6/30/2004 - 6/30/2005		
4)	Expected Claims for the Fiscal Year 6/30/2004 – 6/30/2005	1,524,861
5)	Employer and Employee Premiums Collected	1,212,362
6)	Benefit Payments	(2,454,097)
7)	Net Liabilities Transferred into the 3rd level pool	(1,759,528)
8)	Net Assets Transferred into 3rd level pool	(4,840,290)
Expected Amounts as of 6/30/2005		
9)	Expected Present Value of Benefits [(1) * 1.0775 + ((4) + (6) + (7)) * $(1.0775)^{1/2}$]	23,981,935
10)	Expected Actuarial Value of Assets [(2) * 1.0775 + ((5) + (6) + (8)) * $(1.0775)^{1/2}$]	75,663,671
11)	Expected Unfunded Liability/(Excess Assets) [(9)-(10)]	(51,681,736)
Actual Amounts as of 6/30/2005		
12)	Actual Present Value of Benefits	24,087,838
13)	Actual Actuarial Value of Assets	75,852,828
14)	Actual Unfunded Liability/(Excess Assets) [(12)-(13)]	(51,764,990)
Gain/(Loss) for the Period 6/30/2004 – 6/30/2005		
15)	Liability Gain/(Loss)	(105,903)
16)	Asset Gain/(Loss)	189,158
17)	Total Gain/(Loss)	$ 83,254

Gain/(Loss) Analysis 6/30/2004 – 6/30/2005

Public Agency 4th Level Pool

Amounts as of 6/30/2004		
1)	Present Value of Benefits	$ 82,436,899
2)	Actuarial Value of Assets	114,185,447
3)	Unfunded Liability/(Excess Assets) [(1)-(2)]	(31,748,548)
Amounts During the Period 6/30/2004 – 6/30/2005		
4)	Expected Claims for the Fiscal Year 6/30/2004 – 6/30/2005	5,299,123
5)	Employer and Employee Premiums Collected	2,217,691
6)	Benefit Payments	(8,917,189)
7)	Net Liabilities Transferred into the 4th level pool	4,775,862
8)	Net Assets Transferred into the 4th level pool	5,464,625
Expected Amounts as of 6/30/2005		
9)	Expected Present Value of Benefits $[(1) * 1.0775 + ((4) + (6) + (7)) * (1.0775)^{1/2}]$	90,027,582
10)	Expected Actuarial Value of Assets $[(2) * 1.0775 + ((5) + (6) + (8)) * (1.0775)^{1/2}]$	121,752,988
11)	Expected Unfunded Liability/(Excess Assets) [(9)-(10)]	(31,725,406)
Actual Amounts as of 6/30/2005		
12)	Actual Present Value of Benefits	91,237,149
13)	Actual Actuarial Value of Assets	122,130,132
14)	Actual Unfunded Liability/(Excess Assets) [(12)-(13)]	(30,892,983)
Gain/(Loss) for the Period 6/30/2004 – 6/30/2005		
15)	Liability Gain/(Loss)	(1,209,567)
16)	Asset Gain/(Loss)	377,145
17)	Total Gain/(Loss)	$ (832,423)

Gain/(Loss) Analysis 6/30/2004 – 6/30/2005

Public Agency Indexed Level Pool

Amounts as of 6/30/2004		
1)	Accrued Liability	$ 6,772,638
2)	Actuarial Value of Assets	10,841,380
3)	Unfunded Liability/(Excess Assets) [(1)-(2)]	(4,068,742)
Amounts During the Period 6/30/2004 – 6/30/2005		
4)	Expected Claims for the Fiscal Year 6/30/2004 – 6/30/2005	556,082
5)	Employer and Employee Premiums Collected	186,215
6)	Benefit Payments	(476,885)
7)	Net Liabilities Transferred into the Indexed Level pool	3,573,136
8)	Net Assets Transferred into the Indexed Level pool	4,549,448
Expected Amounts as of 6/30/2005		
9)	Expected Accrued Liability [(1) * 1.0775 + ((4) + (6) + (7)) * $(1.0775)^{1/2}$]	11,088,737
10)	Expected Actuarial Value of Assets [(2) * 1.0775 + ((5) + (6) + (8)) * $(1.0775)^{1/2}$]	16,102,313
11)	Expected Unfunded Liability/(Excess Assets) [(9)-(10)]	(5,013,576)
Actual Amounts as of 6/30/2005		
12)	Actual Accrued Liability	10,623,833
13)	Actual Actuarial Value of Assets	16,141,731
14)	Actual Unfunded Liability/(Excess Assets) [(12)-(13)]	(5,517,898)
Gain/(Loss) for the Period 6/30/2004 – 6/30/2005		
15)	Liability Gain/(Loss)	464,904
16)	Asset Gain/(Loss)	39,418
17)	Total Gain/(Loss)	$ 504,322

State 5th Level Pool

Reconciliation of the Market Value of Assets from the Prior Fiscal Year

1)	Beginning Balance 6/30/2004	$ 103,647,495
2)	Contributions (Employer and Employee)	6,364,717
3)	Benefit Payments	(15,022,919)
4)	Investment Earnings credited	12,928,043
5)	Net Transfer of Assets into and out of this pool	0
6)	Ending Balance 6/30/2005 [(1)+(2)+(3)+(4)+(5)]	$ 107,917,336

Development of the Actuarial Value of Assets

1)	Actuarial Value of Assets as of 6/30/2004	$ 105,407,569
2)	Contributions received during fiscal 2004-2005	6,364,717
3)	Benefits paid during fiscal 2004-2005	(15,022,919)
4)	Net Transfer of Assets into and out of this pool	0
5)	Expected investment earnings during fiscal 2004-2005 [(1) * 0.0775 + ((2)+(3)+(4)) * ($1.0775^{1/2}$ - 1)]	7,839,841
6)	Expected Actuarial Value of Assets as of 6/30/2005 [(1) + (2) + (3) + (4) + (5)]	$ 104,589,208
7)	Market Value of Assets as of 6/30/2005	$ 107,917,336
8)	Actuarial Value of Assets as of 6/30/2005 [(6) + [((7)–(6)) ÷ 15], but not less than 80% or more than 120% of (7)]	$ 104,811,084
9)	Ratio of Actuarial Value to Market Value of Assets	97.12%

Schools 5th Level Pool

Reconciliation of the Market Value of Assets from the Prior Fiscal Year

1)	Beginning Balance 6/30/2004	$ 44,741,420
2)	Contributions (Employer and Employee)	219,273
3)	Benefit Payments	(1,394,571)
4)	Investment Earnings credited	5,742,085
5)	Net Transfer of Assets into and out of this pool	0
6)	Ending Balance 6/30/2005 [(1)+(2)+(3)+(4)+(5)]	$ 49,308,207

Development of the Actuarial Value of Assets

1)	Actuarial Value of Assets as of 6/30/2004	$ 45,268,279
2)	Contributions received during fiscal 2004-2005	219,273
3)	Benefits paid during fiscal 2004-2005	(1,394,571)
4)	Net Transfer of Assets into and out of this pool	0
5)	Expected investment earnings during fiscal 2004-2005 $[(1) * 0.0775 + ((2)+(3)+(4)) * (1.0775^{1/2} - 1)]$	3,463,599
6)	Expected Actuarial Value of Assets as of 6/30/2005 [(1) + (2) + (3) + (4) + (5)]	$ 47,556,580
7)	Market Value of Assets as of 6/30/2005	$ 49,308,207
8)	Actuarial Value of Assets as of 6/30/2005 [(6) + [((7)–(6)) ÷ 15], but not less than 80% or more than 120% of (7)]	$ 47,673,355
9)	Ratio of Actuarial Value to Market Value of Assets	96.68%

Public Agency 1st Level Pool

Reconciliation of the Market Value of Assets from the Prior Fiscal Year

1)	Beginning Balance 6/30/2004	$ 26,379,097
2)	Contributions (Employer and Employee)	504,348
3)	Benefit Payments	(244,652)
4)	Investment Earnings credited	3,216,673
5)	Net Transfer of Assets into and out of 1st level pool	(3,631,533)
6)	Ending Balance 6/30/2005 [(1)+(2)+(3)+(4)+(5)]	$ 26,223,933

Development of the Actuarial Value of Assets

1)	Actuarial Value of Assets as of 6/30/2004	$ 26,379,097
2)	Contributions received during fiscal 2004-2005	504,348
3)	Benefits paid during fiscal 2004-2005	(244,652)
4)	Net Transfer of Assets into and out of this pool	(3,631,533)
5)	Expected investment earnings during fiscal 2004-2005 [(1) * 0.0775 + ((2)+(3)+(4)) * $(1.0775^{1/2} - 1)$]	1,916,159
6)	Expected Actuarial Value of Assets as of 6/30/2005 [(1) + (2) + (3) + (4) + (5)]	$ 24,923,419
7)	Market Value of Assets as of 6/30/2005	$ 26,223,933
8)	Actuarial Value of Assets as of 6/30/2005 [(6) + [((7)–(6)) ÷ 15], but not less than 80% or more than 120% of (7)]	$ 25,010,120
9)	Ratio of Actuarial Value to Market Value of Assets	95.37%

Public Agency 2nd Level Pool

Reconciliation of the Market Value of Assets from the Prior Fiscal Year

1) Beginning Balance 6/30/2004	$ 6,241,163
2) Contributions (Employer and Employee)	251,853
3) Benefit Payments	(178,729)
4) Investment Earnings credited	791,518
5) Net Transfer of Assets into and out of 2nd level pool	(387,340)
6) Ending Balance 6/30/2005 [(1)+(2)+(3)+(4)+(5)]	$ 6,718,465

Development of the Actuarial Value of Assets

1) Actuarial Value of Assets as of 6/30/2004	$ 6,241,163
2) Contributions received during fiscal 2004-2005	251,853
3) Benefits paid during fiscal 2004-2005	(178,729)
4) Net Transfer of Assets into and out of this pool	(387,340)
5) Expected investment earnings during fiscal 2004-2005 [(1) * 0.0775 + ((2)+(3)+(4)) * $(1.0775^{1/2} - 1)$]	471,741
6) Expected Actuarial Value of Assets as of 6/30/2005 [(1) + (2) + (3) + (4) + (5)]	$ 6,398,688
7) Market Value of Assets as of 6/30/2005	$ 6,718,465
8) Actuarial Value of Assets as of 6/30/2005 [(6) + [((7)–(6)) ÷ 15], but not less than 80% or more than 120% of (7)]	$ 6,420,007
9) Ratio of Actuarial Value to Market Value of Assets	95.56%

Public Agency 3rd Level Pool

Reconciliation of the Market Value of Assets from the Prior Fiscal Year

1)	Beginning Balance 6/30/2004	$ 75,191,776
2)	Contributions (Employer and Employee)	1,212,362
3)	Benefit Payments	(2,454,097)
4)	Investment Earnings credited	9,391,283
5)	Net Transfer of Assets into and out of 3rd level pool	(4,840,290)
6)	Ending Balance 6/30/2005 [(1)+(2)+(3)+(4)+(5)]	$ 78,501,034

Development of the Actuarial Value of Assets

1)	Actuarial Value of Assets as of 6/30/2004	$ 76,080,721
2)	Contributions received during fiscal 2004-2005	1,212,362
3)	Benefits paid during fiscal 2004-2005	(2,454,097)
4)	Net Transfer of Assets into and out of this pool	(4,840,290)
5)	Expected investment earnings during fiscal 2004-2005 $[(1) * 0.0775 + ((2)+(3)+(4)) * (1.0775^{1/2} - 1)]$	5,664,975
6)	Expected Actuarial Value of Assets as of 6/30/2005 [(1) + (2) + (3) + (4) + (5)]	$ 75,663,671
7)	Market Value of Assets as of 6/30/2005	$ 78,501,034
8)	Actuarial Value of Assets as of 6/30/2005 [(6) + [((7)–(6)) ÷ 15], but not less than 80% or more than 120% of (7)]	$ 75,852,828
9)	Ratio of Actuarial Value to Market Value of Assets	96.63%

Public Agency 4th Level Pool

Reconciliation of the Market Value of Assets from the Prior Fiscal Year

1)	Beginning Balance 6/30/2004	$ 113,914,564
2)	Contributions (Employer and Employee)	2,217,691
3)	Benefit Payments	(8,917,189)
4)	Investment Earnings credited	14,730,465
5)	Net Transfer of Assets into and out of 4th level pool	5,464,625
6)	Ending Balance 6/30/2005 [(1)+(2)+(3)+(4)+(5)]	$127,410,156

Development of the Actuarial Value of Assets

1)	Actuarial Value of Assets as of 6/30/2004	$ 114,185,447
2)	Contributions received during fiscal 2004-2005	2,217,691
3)	Benefits paid during fiscal 2004-2005	(8,917,189)
4)	Net Transfer of Assets into and out of this pool	5,464,625
5)	Expected investment earnings during fiscal 2004-2005 [(1) * 0.0775 + ((2)+(3)+(4)) * ($1.0775^{1/2}$ - 1)]	8,802,414
6)	Expected Actuarial Value of Assets as of 6/30/2005 [(1) + (2) + (3) + (4) + (5)]	$ 121,752,988
7)	Market Value of Assets as of 6/30/2005	$127,410,156
8)	Actuarial Value of Assets as of 6/30/2005 [(6) + [((7)–(6)) ÷ 15], but not less than 80% or more than 120% of (7)]	$122,130,132
9)	Ratio of Actuarial Value to Market Value of Assets	95.86%

Public Agency Indexed Level Pool

Reconciliation of the Market Value of Assets from the Prior Fiscal Year

1)	Beginning Balance 6/30/2004	$ 10,766,818
2)	Contributions (Employer and Employee)	186,215
3)	Benefit Payments	(476,885)
4)	Investment Earnings credited	1,667,981
5)	Net Transfer of Assets into and out of this pool	4,549,448
6)	Ending Balance 6/30/2005 [(1)+(2)+(3)+(4)+(5)]	$ 16,693,577

Development of the Actuarial Value of Assets

1)	Actuarial Value of Assets as of 6/30/2004	$ 10,841,380
2)	Contributions received during fiscal 2004-2005	186,215
3)	Benefits paid during fiscal 2004-2005	(476,885)
4)	Net Transfer of Assets into and out of this pool	4,549,448
5)	Expected investment earnings during fiscal 2004-2005 $[(1) * 0.0775 + ((2) + (3) + (4)) * (1.0775^{1/2} - 1)]$	1,002,155
6)	Expected Actuarial Value of Assets as of 6/30/2005 [(1) + (2) + (3) + (4) + (5)]	$ 16,102,313
7)	Market Value of Assets as of 6/30/2005	$ 16,693,577
8)	Actuarial Value of Assets as of 6/30/2005 [(6) + [((7)–(6)) ÷ 15], but not less than 80% or more than 120% of (7)]	$16,141,731
9)	Ratio of Actuarial Value to Market Value of Assets	96.69 %

Summary of Plan Provisions

The 1959 Survivor program was designed to provide pre-retirement death benefits comparable to those provided by Social Security, formally the Federal Old Age and Survivor Insurance (OASI) program, to CalPERS' members not covered by Social Security.

Eligibility – The benefit is available only to those members not covered by Social Security OASI benefits. For public agencies, this benefit is provided by contract with CalPERS. Only those public agencies that contract for the 1st, 2nd, 3rd, 4th, or Indexed level of the program are eligible for the benefits valued in this report. For State and Schools members, the 5th level benefit is provided by State statute to certain groups of employees. Members who are eligible for the benefit are given a one-time option to join at the time of contract. Members hired subsequent to the time of contract are automatically enrolled in the program.

Benefit – The benefit is a monthly pension to eligible surviving spouses or domestic partners and children. A spouse or domestic partner is eligible if he or she (1) has care of eligible children or (2) is age 60 (62 for levels 1, 2, and 3) or older. A child is eligible if he or she is under 22 and not married. Physically disabled children are also eligible until the disability ceases. If there are no eligible children or spouse/domestic partner, dependent parents over age 60 (62 for levels 1, 2, and 3) may be eligible.

The monthly benefit amount depends upon the coverage level within the program.

Level 1 (For Members of Public Agencies who Contract)	
a. spouse or domestic partner with two or more eligible children; or three or more eligible children	$430
b. spouse with one eligible child; or two eligible children only	$360
c. one eligible child only; or spouse age 62 or older; or eligible dependent parents	$180

Level 2 (For Members of Public Agencies who Contract)	
a. spouse or domestic partner with two or more eligible children; or three or more eligible children	$538
b. spouse with one eligible child; or two eligible children only	$450
c. one eligible child only; or spouse age 62 or older; or eligible dependent parents	$225

Level 3 (For Members of Public Agencies who Contract)	
a. spouse or domestic partner with two or more eligible children; or three or more eligible children	$840
b. spouse with one eligible child; or two eligible children only	$700
c. one eligible child only; or spouse age 62 or older; or eligible dependent parents	$350

Summary of Plan Provisions (continued)

Level 4 (For Members of Public Agencies who Contract)	
a. spouse or domestic partner with two or more eligible children; or three or more eligible children	$2,280
b. spouse with one eligible child; or two eligible children only	$1,900
c. one eligible child only; or spouse age 60 or older; or eligible dependent parents	$950
Indexed Level (For Members of Public Agencies who Contract)	
a. spouse or domestic partner with two or more eligible children; or three or more eligible children	$1,689[1]
b. spouse with one eligible child; or two eligible children only	$1,126[1]
c. one eligible child only; or spouse age 60 or older; or eligible dependent parents	$563[1]
Level 5 – (For State and Schools Members)	
a. spouse or domestic partner with two or more eligible children; or three or more eligible children	$1,800
b. spouse with one eligible child; or two eligible children only	$1,500
c. one eligible child only; or spouse age 60 or older; or eligible dependent parents	$750

Public agency employers joining the Public Agency 4th or Indexed Level Pool during the 2006-2007 fiscal year are required to pay only the Unfunded Liability (amortized over a period of 5 years) which exists at the time they join *plus* the agency's normal cost at the new benefit level for the first five years. If they have excess assets, then they will be allowed to use as much of it as necessary to offset any increased liabilities incurred at the higher level and required employer premiums incurred at the higher level.

1 - These figures indicate calendar year benefit amounts for the Indexed Level in effect for calendar year 2006. Benefit amounts will increase by 2 percent every following January 1.

Comparison of Social Security and CalPERS 1959 Survivor Benefits

	Social Security[1]		
Survivor Group	**Low**	**Average**	**High**
One Survivor	$ 674	$ 1,065	$ 1,447
Two Survivors	$ 1,348	$ 2,130	$ 2,894
Three Survivors	$ 1,424	$ 2,550	$ 3,378

The values shown assume death at age 45 (benefits slightly higher at lower ages, lower at higher ages), and steady earnings. “Low” is 2005 salary of $25,000, “Average” is $50,000, and “High” is exceeding the maximum OASDI taxable earnings.

	CalPERS 1959 Survivor Benefit					
Survivor Group	**First**	**Second**	**Third**	**Fourth**	**Indexed**	**Schools/ State 5th**
One Survivor	$ 180	$ 225	$ 350	$ 950	$ 563	$ 750
Two Survivors	$ 360	$ 450	$ 700	$ 1,900	$ 1,126	$ 1,500
Three Survivors	$ 430	$ 538	$ 840	$ 2,280	$ 1,689	$ 1,800

1 - Unlike the 1959 Survivor Benefit (with the exception of the Indexed level), federal Social Security benefits normally receive an automatic cost-of-living adjustment every year. Also, unlike the 1959 Survivor Benefit, Social Security benefits are based on a worker’s actual earnings up to the maximum covered.

Actuarial Funding Method for Public Agency 1st, 2nd, 3rd and 4th Level, and State and Schools 5th Level Pools

The actuarial funding method used, as provided in State statute for public agency 1st, 2nd, 3rd and 4th level, and State and Schools 5th level pools, is called the Term Insurance method. This is a terminal funding arrangement with no pre-funding of the survivor benefits payable on account of deaths expected to occur beyond those in the coming year.

The Normal Cost for the year is equal to the Expected Claims (present value of benefits arising from deaths) that will occur in the coming fiscal year. The expected claims for the coming fiscal year is determined as the expected claim per member, per month multiplied by the expected member months for the coming fiscal year. The expected claim per member, per month is equal to the average claims per member, per month over the most recent four calendar years for which such claim data is available. For the School pool, the number of deaths for calendar year 2004 was one. This follows a sequence of deaths from the four previous years of 7, 5, 4, and 5. This can be directly attributed to the fact that the pool is quite small which ultimately produces more uncertainty in the expected number of deaths from year to year. Subsequently, if one were to use the data from calendar year 2004 in the development of the normal cost or expected claim, there would be a considerable drop in its value this year, with the likely potential for it to increase again next year. Consequently, this piece of data was considered anomalous and dropped from the claim calculation.

The Accrued Liability is equal to the Present Value of Benefits payable to current survivors. If the Accrued Liability exceeds the Actuarial Value of Assets, the difference is called the Unfunded Liability. On the other hand, if the Actuarial Value of Assets exceeds the Accrued Liability, the difference is called Excess Assets.

The total required monthly premium is the sum of the Present Value of Benefits at the time of death for the most recent four complete calendar years where such claim data is available, divided by the number of member months. The required employer monthly premium is the total required monthly premium less the $2.00 per month member contributions as required by State Statute Section 21581. For all levels, existing excess assets in the pool will be amortized and directly used to offset required employer contributions. However, for the State and Schools 5th Level pool, if the total required monthly premium after amortization of excess assets exceeds $4, the member and the employer shall evenly share the required monthly premium. For the current valuation date, the unfunded liability for the State 5th Level pool was amortized over a 30-year period. Excess assets for the Schools 5th Level pool, and Public Agency 1st, 2nd, and 3rd Level pools were sufficient to offset required employer contributions indefinitely, based on June 30, 2005 data and assumptions. Excess assets for the Public Agency 4th Level were amortized over a 30-year period, and are not sufficient to fully offset the required employer contribution. The resulting employer contribution for the 4th Level is $2.40 per covered member per month.

Actuarial Funding Method for Public Agency Indexed Level Pool

The funding method used for the Public Agency Indexed Level pool is the Entry Age Normal method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces an annual cost that increases by approximately 2% in each year.

The Normal Cost for the Public Agency Indexed Level pool is the portion of the total Entry Age Normal cost, as described in the preceding paragraph that is allocated to the current fiscal year. Since there is no cost allocated to the current fiscal year for those already receiving benefits or are in a deferred status, only active members have a Normal Cost. The population demographics are assumed to remain stable for purposes of projecting the Normal Cost to the year for which the contribution requirement is being determined.

The Accrued Liability is equal to the Present Value of Future Benefits for both current survivors and active members, less the Present Value of Future Normal Costs.

The total required monthly premium is the sum of the individual Normal Costs divided by the number of member months. The required employer monthly premium is the total required monthly premium less the $2.00 per month member contributions as required by State Statute Section 21581. Existing excess assets in the pool will be amortized and directly used to offset required employer contributions. However, if the total required monthly premium after amortization of excess assets exceeds $4.00, the member and the employer shall evenly share the required monthly premium. Excess assets for the Public Agency Indexed Level were amortized over a 30-year period, and are no longer sufficient to fully offset required employer contributions. The resulting employer contribution for the Indexed Level is $0.80 per covered member per month. Even though there were asset and liability gains, the migration of one particularly large employer has contributed to this cost for 2006/2007. Although the employer brought assets into the pool which exceeded their liabilities, the surplus wasn't enough to increase the overall funded ratio of the pool. Combining this with a 30-year amortization for the additional surplus, proved not enough to offset the increase in the total required annual premiums of the pool. This has prompted staff to consider a sensitivity analysis on the effects of a large employer migration between pools. Should the potential for an adverse effect on the funded status and/or required premium of the receiving pool be significant, we may reconsider our policies concerning the cost of "buying into" a pool.

Asset Valuation Method

In order to dampen the effect of short term market value fluctuations on employer contribution rates, the following asset smoothing technique is used. First, an Expected Value of Assets is computed by bringing forward the prior year's Actuarial Value of Assets and the contributions received and benefits paid during the year at the assumed actuarial rate of return. The Actuarial Value of Assets is then computed as the Expected Value of Assets plus one-fifteenth of the difference between the actual Market Value of Assets and Expected Value of Assets as of the valuation date. However, in no case will the Actuarial Value of Assets be less then 80% nor greater than 120% of the actual Market Value of Assets. This smoothing technique is the same as that used for all CalPERS retirement programs.

Actuarial Assumptions

The actuarial assumptions used in this valuation include the investment return rate and the mortality rates for current beneficiaries. These assumptions are shown below. Mortality rates for active members of all pools combined are shown on Attachment 2 and are inherent in the calculation of the annual normal costs.

Economic Assumptions

Investment Return	7.75% compounded annually (net of administrative expenses).

Demographic Assumptions

Beneficiary Mortality	Rates that vary by age and sex. See table below for sample rates.

Attained Age	Male Mortality Rate	Female Mortality Rate
20	.0005	.0003
25	.0006	.0003
30	.0008	.0003
35	.0008	.0005
40	.0010	.0007
45	.0015	.0009
50	.0025	.0014
55	.0043	.0025
60	.0072	.0044
65	.0130	.0080
70	.0214	.0128
75	.0372	.0216
80	.0626	.0388
85	.1020	.0722
90	.1738	.1259
95	.2592	.2177
100	.3472	.3204
105	.5853	.5609
110	1.0000	1.0000

Additional Actuarial Assumptions Applicable to the Public Agency Indexed Level

The Public Agency Indexed Level's Accrued Liability and Entry Age Normal cost for active members are calculated based on the actuarial assumptions for our Public Agency miscellaneous 2% @ 55 and police 2% @ 50 pension plans. The final valuation results equals the sum of the results valued on the basis of a miscellaneous 2% @ 55 plan plus the results valued on the basis of a police 2% @ 50 plan, where all miscellaneous employees of plans contracting for the Public Agency Indexed Level of 1959 Survivor benefits are valued using miscellaneous 2% @ 55 assumptions, and all safety employees of plans contracting for the Public Agency Indexed Level of 1959 Survivor benefits are valued using police 2% @ 50 assumptions.

The actuarial assumptions for each of these plans are as follows:

Eligible Survivor Status

For active members of both the Miscellaneous and Safety Police plans, the probability of having eligible survivor(s) at the date of death is assumed according to the following table:

Age at Death	Percent having Eligible Survivor(s)
Age 20 and under	30%
Between ages 21 and 24	50%
Between ages 25 and 29	70%
Between ages 30 and 39	90%
Between ages 40 and 49	95%
Between ages 50 and 54	90%
Age 55 and above	85%

Average claims are developed at every age using actual experience from the program. These average claims are then multiplied by the percentages in the above table. The results are used to estimate expected claims in the active population.

Additional Actuarial Assumptions Applicable to the Public Agency Indexed Level (continued)

Benefit amounts and Present Value of benefits were based on average claim experience. A sample of the average claim experience is shown in the table below:

Age at Death	Present Value of Average Claim at the Time of Death*
20 and below	$ 26,732
25	$ 87,923
30	$ 121,125
35	$ 114,112
40	$ 105,344
45	$ 88,781
50	$ 71,085
55	$ 59,406
60	$ 56,524
65	$ 57,000
70	$ 57,570
75	$ 53,201
80 and above	$ 37,090

Average claims were calculated using actual experience from the 1959 Survivor program and smoothed using a polynomial regression model.

*Values are based on an initial benefit of $500/$1,000/$1,500 for one two or three survivors, respectively. This was the benefit level on June 30, 2000, when the Indexed Level first became effective. The valuation program increases these amounts by 2% per year up to the current valuation year.

Public Agency Miscellaneous 2% @ 55

Non-Industrial (Not Job-Related) Death and Non-Industrial (Not Job-Related) Disability

Rates vary by age and sex. See sample rates in table below.

	Male		Female	
Attained Age	Non-Industrial (Not Job-Related) Death	Non-Industrial (Not Job-Related) Disability	Non-Industrial (Not Job-Related) Death	Non-Industrial (Not Job-Related) Disability
20	0.00019	0.00010	0.00009	0.00010
25	0.00027	0.00020	0.00014	0.00020
30	0.00038	0.00020	0.00021	0.00040
35	0.00054	0.00080	0.00031	0.00100
40	0.00077	0.00150	0.00046	0.00160
45	0.00110	0.00240	0.00068	0.00230
50	0.00156	0.00370	0.00102	0.00350
55	0.00221	0.00490	0.00151	0.00410
60	0.00314	0.00550	0.00226	0.00390

Additional Actuarial Assumptions Applicable to the Public Agency Indexed Level (continued)

Public Agency Miscellaneous 2% @ 55 (continued)

Service Retirement

Rates vary by age and service. See table sample below.

	Service Retirement					
	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.0145	0.0184	0.0224	0.0269	0.0307	0.0366
51	0.0106	0.0135	0.0164	0.0198	0.0226	0.0269
52	0.0114	0.0145	0.0176	0.0212	0.0241	0.0287
53	0.0150	0.0190	0.0231	0.0278	0.0318	0.0378
54	0.0199	0.0252	0.0307	0.0369	0.0421	0.0502
55	0.0475	0.0604	0.0734	0.0883	0.1008	0.1200
56	0.0395	0.0502	0.0611	0.0735	0.0838	0.0998
57	0.0427	0.0542	0.0659	0.0793	0.0905	0.1078
58	0.0473	0.0601	0.0730	0.0879	0.1003	0.1194
59	0.0510	0.0648	0.0788	0.0948	0.1082	0.1287
60	0.0715	0.0908	0.1104	0.1328	0.1516	0.1804
61	0.0715	0.0908	0.1104	0.1328	0.1516	0.1805
62	0.1275	0.1620	0.1969	0.2369	0.2704	0.3219
63	0.1287	0.1636	0.1988	0.2392	0.2731	0.3250
64	0.0931	0.1182	0.1438	0.1729	0.1974	0.2350
65	0.1738	0.2209	0.2686	0.3231	0.3688	0.4390
66	0.1085	0.1378	0.1675	0.2016	0.2301	0.2739
67	0.1109	0.1409	0.1713	0.2061	0.2353	0.2801
68	0.0878	0.1116	0.1356	0.1632	0.1863	0.2217
69	0.1035	0.1315	0.1599	0.1923	0.2196	0.2614
70	0.1224	0.1555	0.1890	0.2274	0.2596	0.3090

Termination with Refund

Rates vary by entry age and service. See sample rates in table below.

	Termination with Refund					
Duration of	Entry Age					
Service	20	25	30	35	40	45
0	0.1760	0.1691	0.1622	0.1553	0.1483	0.1414
1	0.1561	0.1492	0.1423	0.1353	0.1284	0.1215
2	0.1362	0.1293	0.1224	0.1154	0.1085	0.1016
3	0.1163	0.1094	0.1025	0.0955	0.0886	0.0817
4	0.0964	0.0895	0.0826	0.0756	0.0687	0.0618
5	0.0283	0.0257	0.0232	0.0206	0.0181	0.0155
10	0.0184	0.0161	0.0139	0.0117	0.0095	0.0073
15	0.0120	0.0102	0.0083	0.0064	0.0046	0.0027
20	0.0073	0.0057	0.0041	0.0025	0.0009	0.0002
25	0.0034	0.0022	0.0009	0.0002	0.0002	0.0002
30	0.0010	0.0002	0.0002	0.0002	0.0002	0.0002

Additional Actuarial Assumptions Applicable to the Public Agency Indexed Level
(continued)

Public Agency Miscellaneous 2% @ 55 (continued)

Termination with Vested Deferred Benefits

Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Termination with Vested Deferred Benefits – Entry Age 20	25	30	35	40
5	0.0482	0.0439	0.0395	0.0351	0.0307
10	0.0390	0.0343	0.0296	0.0249	0.0000
15	0.0326	0.0274	0.0224	0.0000	0.0000
20	0.0245	0.0192	0.0000	0.0000	0.0000
25	0.0156	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000

Public Agency Police 2% @ 50

Non-Industrial (Not Job-Related) Death and Non-Industrial (Not Job-Related) Disability

Rates vary by age and sex. See sample rates in table below.

	Male		Female	
Attained Age	Non-Industrial (Not Job-Related) Death	Non-Industrial (Not Job-Related) Disability	Non-Industrial (Not Job-Related) Death	Non-Industrial (Not Job-Related) Disability
20	0.00019	0.00010	0.00009	0.00010
25	0.00027	0.00010	0.00014	0.00010
30	0.00038	0.00020	0.00021	0.00020
35	0.00054	0.00030	0.00031	0.00030
40	0.00077	0.00040	0.00046	0.00040
45	0.00110	0.00050	0.00068	0.00050
50	0.00156	0.00080	0.00102	0.00080
55	0.00221	0.00130	0.00151	0.00130
60	0.00314	0.00200	0.00226	0.00200

Termination with Vested Deferred Benefits

Rates vary by entry age and service. See sample rates in table below.

Duration of Service	Termination with Vested Deferred Benefits – Entry Age 20	25	30	35	40
5	0.0187	0.0187	0.0187	0.0187	0.0187
10	0.0145	0.0145	0.0145	0.0145	0.0000
15	0.0094	0.0094	0.0094	0.0000	0.0000
20	0.0075	0.0075	0.0000	0.0000	0.0000
25	0.0067	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	0.0000

Additional Actuarial Assumptions Applicable to the Public Agency Indexed Level
(continued)

Public Agency Police 2% @ 50 (continued)

Termination with Refund

Rates vary by entry age and service. See sample rates in table below.

	Termination with Refund					
Duration of	Entry Age					
Service	20	25	30	35	40	45
0	0.1299	0.1299	0.1299	0.1299	0.1299	0.1299
1	0.0816	0.0816	0.0816	0.0816	0.0816	0.0816
2	0.0348	0.0348	0.0348	0.0348	0.0348	0.0348
3	0.0331	0.0331	0.0331	0.0331	0.0331	0.0331
4	0.0314	0.0314	0.0314	0.0314	0.0314	0.0314
5	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110
10	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068
15	0.0035	0.0035	0.0035	0.0035	0.0035	0.0035
20	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
25	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
30	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012

Service Retirement

Rates vary by age and service. See table sample below.

	Service Retirement					
	Duration of Service					
Age	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
50	0.0138	0.0138	0.0138	0.0138	0.0253	0.0451
51	0.0123	0.0123	0.0123	0.0123	0.0226	0.0402
52	0.0262	0.0262	0.0262	0.0262	0.0480	0.0855
53	0.0523	0.0523	0.0523	0.0523	0.0957	0.1706
54	0.0697	0.0697	0.0697	0.0697	0.1275	0.2274
55	0.0899	0.0899	0.0899	0.0899	0.1645	0.2932
56	0.0638	0.0638	0.0638	0.0638	0.1166	0.2079
57	0.0711	0.0711	0.0711	0.0711	0.1300	0.2318
58	0.0628	0.0628	0.0628	0.0628	0.1149	0.2049
59	0.1396	0.1396	0.1396	0.1396	0.1735	0.2544
60	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
61	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
62	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
63	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
64	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506
65	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Attachments

Attachment 1
Demographic and Experience Information

Current and Deferred Beneficiaries – All Levels of the 1959 Survivor Program for Public Agencies, State and Schools

Currently, there are 3,711 cases where liability exists. These cases include widows or widowers in deferred status even though presently there are no benefits being paid. There are 9 possible beneficiary combinations that can be associated with each case. The combinations presented below are given as of the time of death of the member *and* as they exist currently, for all levels of the 1959 Survivor program.

	At time of Death		Current Condition	
Status	**Number**	**Percentage**	**Number**	**Percentage**
Widow deferred	1,211	32.6%	868	23.4%
Widow only receiving	396	10.7%	2,002	53.9%
Widow with one child	678	18.3%	297	8.0%
Widow with two or more children	1,207	32.5%	272	7.3%
One child	89	2.4%	170	4.6%
Two children	76	2.0%	60	1.8%
Three or more children	48	1.3%	28	0.8%
One parent	4	0.1%	5	0.1%
Two parents	2	0.1%	1	0.0%
Totals	3,711	100.0%	3,711	100.0%

Beneficiary Combinations at Date of Death – All Levels of the 1959 Survivor Program for Public Agencies, State and Schools

There exist 6,322 cases of death associated with the 1959 Survivor program since its inception. With this data, a historical account of each combination can be made. Further, probabilities can be approximated with respect to these combinations when a member dies. Below is a list of all combinations on record, numbers and associated percentages as of the time of death, for all levels of the 1959 Survivor program.

Status	**Number**	**Percent**
Widow deferred	1,956	30.9%
Widow only receiving	831	13.1%
Widow with one child	974	15.4%
Widow with two or more children	1,690	26.7%
One child	401	6.3%
Two children	285	4.5%
Three or more children	165	2.6%
One parent	18	0.3%
Two parents	2	0.0%
Totals	6,322	100.0%

Attachment 2

1959 Survivor Coverage by Level

A CalPERS contracting agency that has employees not covered by Social Security will offer those employees 1st, 2nd, 3rd, 4th, or Indexed Level of 1959 Survivor benefit coverage, or no 1959 Survivor coverage at all. The following table shows the number of agencies and the count of active employees under each coverage scenario. An agency offering different levels of benefits to different groups of employees will be counted each time for each level that it offers.

As of June 30, 2005	Contracting Agencies	Covered Active Employees
No Coverage [1]	191	17,756
Level 1 Benefits	47	8,681
Level 2 Benefits	42	4,087
Level 3 Benefits	331	47,783
Level 4 Benefits	339	64,176
Indexed Level Benefits	56	8,783
Total	1006	151,266

1- In the June 30, 2004 valuation report, this count included agencies with no active members. In this valuation report, the count includes only agencies that have active members.

Attachment 3
1959 Survivor Deaths Per Year

Displayed on the following page is a year-by-year account of the number of deaths under the program since 1959 and the death rate each year since 1980 for public agencies, State, and Schools. The historic covered active counts are not available prior to 1980. Deaths given in the exhibits below are on a calendar year basis. Counts represent mid-year active exposure.

Attachment 3 - continued

1959 Survivor Deaths Per Year

	Public Agency			State			School		
Calendar Year	Deaths	Mid-year Active Counts	Death Rate	Deaths	Mid-year Active Counts	Death Rate	Deaths	Mid-year Active Counts	Death Rate
1959	0		*	0		*	1		*
1960	4		*	85		*	14		*
1961	5		*	101		*	11		*
1962	8		*	80		*	21		*
1963	14		*	60		*	14		*
1964	20		*	84		*	12		*
1965	20		*	83		*	9		*
1966	29		*	69		*	6		*
1967	41		*	75		*	14		*
1968	24		*	95		*	13		*
1969	40		*	93		*	17		*
1970	41		*	90		*	14		*
1971	42		*	75		*	10		*
1972	47		*	74		*	12		*
1973	54		*	74		*	14		*
1974	52		*	70		*	7		*
1975	67		*	101		*	10		*
1976	56		*	69		*	6		*
1977	59		*	75		*	22		*
1978	71		*	95		*	17		*
1979	57		*	90		*	7		*
1980	62		*	86		*	7		*
1981	80	54,354	0.15%	74	38,192	0.19%	10	7,843	0.13%
1982	73	56,401	0.13%	79	37,030	0.21%	11	7,987	0.14%
1983	82	59,917	0.14%	67	37,186	0.18%	8	7,685	0.10%
1984	79	65,480	0.12%	69	38,488	0.18%	6	7,104	0.08%
1985	71	66,927	0.11%	79	39,175	0.20%	5	6,842	0.07%
1986	64	68,500	0.09%	48	39,391	0.12%	8	6,500	0.12%
1987	65	69,340	0.09%	53	40,315	0.13%	10	6,200	0.16%
1988	80	84,808	0.09%	51	41,980	0.12%	9	7,100	0.13%
1989	67	82,046	0.08%	63	44,069	0.14%	6	6,899	0.09%
1990	90	86,196	0.10%	65	45,502	0.14%	7	7,942	0.09%
1991	97	91,574	0.11%	40	47,708	0.08%	7	7,752	0.09%
1992	88	95,840	0.09%	44	48,872	0.09%	8	6,823	0.12%
1993	82	97,752	0.08%	55	46,872	0.12%	4	6,776	0.06%
1994	74	98,088	0.08%	60	47,323	0.13%	11	6,653	0.17%
1995	75	99,235	0.08%	51	47,689	0.11%	9	6,751	0.13%
1996	77	100,494	0.08%	54	51,746	0.10%	6	6,726	0.09%
1997	71	102,475	0.07%	60	55,084	0.11%	4	6,794	0.06%
1998	83	112,389	0.07%	59	55,435	0.11%	7	6,956	0.10%
1999	93	118,850	0.08%	59	59,406	0.10%	1	7,444	0.01%
2000	76	121,538	0.06%	56	60,349	0.09%	7	8,338	0.08%
2001	89	116,161	0.08%	57	64,309	0.09%	5	7,884	0.06%
2002	85	129,355	0.07%	48	65,558	0.07%	4	9,195	0.04%
2003	92	129,620	0.07%	64	68,791	0.09%	5	9,390	0.05%
2004	86	131,633	0.07%	57	64,252	0.09%	1	9,325	0.01%